



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

Ch

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,024	02/14/2002	Daniel George Bridgwater	CIN-0103-US	7370

7590                    03/24/2003

Mr. Daniel C. Stelter  
Cincinnati Machine  
Patent Law Department  
4701 Marburg Avenue  
Cincinnati, OH 45209

EXAMINER

ROSS, DANA

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 03/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N.K.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/076,024	BRIDGWATER, DANIEL GEORGE	
	<b>Examiner</b> Dana Ross	<b>Art Unit</b> 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 14 February 2002.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-27 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### **Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### **Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Faxing of Responses to Office Actions***

1. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to Office Actions directly into the Group at (703) 872-9302 or, for responses after final rejection only, to (703) 872-9303. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the examiner.

### ***Claim Objections***

2. Claim 16 and 23 are objected to because of the following informalities:

Claim 16, it is not clear how an outflow of fluid from the receptacle of claim 12/1 can be delivered at a higher rate than the fluid is provided to the receptacle.

Claim 23, it appears the claim is incomplete or missing a word. It is not clear what "to deliver fluid to the or each receptacle" means.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6, 11, 15 and 18, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

In the present instance, claim 6 recites the broad recitation "the substantial volume is at least 2 litres", and the claim also recites "the substantial volume is at least 5 litres" which is the narrower statement of the range/limitation.

Claim 11 recites the broad recitation "between 3 and 20 litres", and the claim also recites "between 5 and 10 litres" which is the narrower statement of the range/limitation.

Claim 15 recites the broad recitation "between 2 and 10 litres per minute", and the claim also recites "between 5 and 7 litres" which is the narrower statement of the range/limitation.

Claim 18 recites the broad recitation "between 2 and 7 seconds", and the claim also recites "between 3 and 5 seconds" which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 13 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,210,085 (Haninger). In regard to claim 1-3, 13 and 25, Haninger teaches a machine tool comprising means to flow fluid across one or more surfaces of the machine to remove swarf, the means comprising a fluid receptacle 22, a means to deliver fluid to the receptacle, a flow line extending from the receptacle to one or more machine surfaces through which fluid may flow from the receptacle in the removal of swarf from the surface, and outflow means to cause fluid to flow from the receptacle intermittently (col. 4, lines 5-13).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 5,683,210 (Phillips et al.). Haninger teaches all aspects of the above claim 1 and 3 rejections. Haninger does not teach how the intermittent flow of fluid is controlled. the control mechanism for the receptacle. It would have been obvious that Hanninger uses a valve mechanism to control the intermittent flow. Phillips et al. teaches the

Art Unit: 3722

use of the valve 36 to control the intermittent flow and the means 42 to restrain significant flow of fluid from the receptacle until a substantial volume has accumulated within the receptacle (col. 3, lines 1-8). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify cleaning method and machinery as taught by Haninger to include the valve and restrain mechanism as taught by Phillips et al. for the purpose of controlling the flow of fluid washing debris from a work area (see Phillips et al. Abstract, lines 1-2).

9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 5,683,210 (Phillips et al.) in view of U.S. Pat. No. 5,593,596 (Bratten). Haninger in view of Phillips et al. teaches all aspects of the above claim 4 rejection. Hanninger in view of Phillips et al. does not teach the volume from the receptacle. Bratten teaches the receptacle may be of any of various conventional type (col. 3, lines 30-32). Therefore it would have been obvious to modify the receptacle as taught by Hanninger to include the various conventional types as taught by Bratten for the purpose of creating various flows (see Bratten, col. 3, lines 30-41).

10. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 6,214,222(Gerber). Haninger teaches all aspects of the above claim 1 rejection. Haninger does not teach the use of a siphon. Gerber teaches a siphon (col. 6, lines 21-25). Gerber does not teach the use of a double siphon. Haninger in view of Gerber discloses the claimed invention except for the double siphon and the flow rate. It would have been an obvious to one having ordinary skill in the art at the time the invention was made to use a double siphon with a flow rate between 3 and 20 litres, since it has been held that mere

Art Unit: 3722

duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8, and since it has been held that where the general conditions of a claim are disclosed in prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Furthermore, Applicant has not disclosed that the flow rate provides an advantage, is used for a particular purpose, or solves a stated problem.

11. Claims 12, 14, 15, 17- 21, 23, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 5,593,596 (Bratten). Haninger teaches all aspects of the above claim 1, 13 and 25 rejections. Hanninger does not teach the pump or time interval between successive outflows from the fluid receptacle. Bratten teaches the pump delivering the various volumes to the receptacle by any of a various conventional types currently on the market (col. 3, lines 30-51). Bratten also teaches the use of a sump 18A. Therefore it would have been obvious to modify the receptacle as taught by Hanninger to include the various conventional pumps as taught by Bratten for the purpose of creating various flows (see Bratten, col. 3, lines 30-41).

In regard to claim 20, Hanninger in view of Bratten discloses the claimed invention except for the plurality of parts. It would have been an obvious matter of design choice to have a plurality of receptacles and delivery means for a plurality of surfaces, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

12. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 5,593,596 (Bratten) in view of U.S. Pat. No. 6,126,099 (Fachinger et al.). Haninger in view of Bratten teach all aspects of the claimed

Art Unit: 3722

invention as described in the above claim 21 rejection. Haninger does not teach a sump for separating the fluid and swarf. Fachinger et al. teaches placing a chip separator sump to separate the chips from the swarf (col. 5, lines 54-56). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haninger to include the chip separating sump as taught by Fachinger et al. for the purpose of separating the swarf from the fluid.

*Conclusion*

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Pat. No. 6,257,811 (Schweizer et al.)
- U.S. Pat. No. 5,683,210 (Phillips et al.)
- U.S. Pat. No. 5,078,256 (Hatano et al.)
- U.S. Pat. No. 5,466,380 (Bratten, Jack R.)
- U.S. Pat. No. 6,210,086 (Lecornet et al.)
- U.S. Pat. No. 6,126,099 (Fachinger et al.)
- U.S. Pat. No. 5,586,848 (Suwijn, Paul W.)
- U.S. Pat. No. 5,205,686 (de Caussin, Rodney A.)
- U.S. Pat. No. 6,508,944 (Bratten, Jack R.)

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is (703) 305-7764. The examiner can normally be reached on Mon-Fri 7:00am - 3:30pm.

Art Unit: 3722

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

dmr  
March 13, 2003

  
A. L. WELLINGTON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700